

REMARKS

Review and reconsideration on the merits are requested.

Status of Claims

Claims 1-8 are withdrawn, at the time of rejection claims 9-20 were rejected. Claims 9 and 20 are combined and claims 19 and 20 are canceled.

The Rejection

Claims 9-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over PN 5028330 Caronia et al (Caronia) in view PN 5300536 Takahashi et al (Takahashi) and PN 3142715 Burk (Burk) as evidenced by Yaws (MPL-Yaws' Handbook of Thermo and Physical Properties).

Noting the rejection of claims 19 and 20 is mooted by canceling claims 19 and 20, the rejection of claims 9-18 is respectfully traversed.

Applicants focus on Takahashi and Burk in traversing the rejection. They offer selective comments on other points that the Examiner has made.

Regarding Takahashi

In Point b. at page 7 of the Action, the Examiner correctly points out that claim 7 is a withdrawn claim. However, claim 7 is the same in substance as claim 19, now cancelled, and claim 20 is the same in substance as claim 8, now claim 20 now being combined with claim 9.

In claim 9, the sealant composition is filled into a groove of a molding die, the groove being formed coincident with the seal section which is formed on a top face and/or bottom of a cylindrical filter element having a chrysanthemum-like cross section. It is further stated that the filled sealant composition can be laminated. See claim 9.

Point “i” at Page 6 of the Action

In Point “i” at page 6 of the Action, with regard to claim 20, the Examiner admits that Takahashi is silent as to any viscosity “for the compound”. In the Examiner’s view, however, given that Takahashi teaches using the same composition as the applicant for the same purpose as the applicant, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the composition with the viscosity of 2000 mPa·s or greater in optimization of the component viscosity by using additives as taught by Takahashi, the Examiner citing col. 8, lines 1-3 of Takahashi.

Thus, the Examiner’s basic position is that the viscosity of claim 20 would have been an obvious matter of choice to one of ordinary skill in the art from the fact that Takahashi involves “the same purpose” as the present invention, i.e., in other words, from the description of the sealant.

Applicants first note the disclosure in Takahashi at col. 8, lines 2/3, where it is stated additives which include “an acrylic, urethane or epoxy resin or silica may be added for increasing viscosity and volume.”

Applicants respectfully submit that it is unclear or ambiguous from this disclosure in Takahashi whether the viscosity of the composition which results is high or low. Specifically, the viscosity of the composition in Takahashi will vary depending upon the type and the compounding amount of the resin or the silica, and, in Applicants’ view, it is not possible from the disclosure in Takahashi to gain a teaching of a viscosity of 2000 mPa·s or more of the composition of claim 20 now included into claim 9 (which would be considered a medium viscosity, in Applicants’ view, rather than a high viscosity).

Applicants firstly submit that, fairly construed, the above teaching in Takahashi would not teach one of ordinary skill in art whether the viscosity of the composition is high or low. That is, the viscosity of the composition will vary depending upon the type and the compounding amount of the resin or silica as such, and Applicants thus respectfully submit that it is not possible from the disclosure in Takahashi for one of ordinary skill in the art to reach the viscosity set forth in claim 9 (originally in claim 20, a medium viscosity, rather than a high viscosity) required for the special use of the present invention which is a sealing agent for filter elements.

With regard to the “same purpose” in Takahashi, i.e., whether the viscosity value of 2000 mPa·s or more is directly taught or suggested in Takahashi from the disclosure of a sealing agent in Takahashi, Applicants believe that this is not the case from Takahashi.

Applicants wish to emphasize that examples of the use of a sealing agent of the photo-curing type include use for automobiles such as use in a washer pump, horn or surge tank, in addition to use as a sealing agent for a filter element, in accordance with the present invention. In addition, for mechanical uses such as in a motor and for electric and electronic use such as an electrode terminal, use in a liquid crystal, an electronic parts case or a solar battery, depending upon each use, an appropriate viscosity range is set.

Accordingly, Applicants respectfully submit that simply because Takahashi discloses use as a “sealing agent” that one of ordinary skill in the art would not be led to the viscosity now recited in claim 9 (from claim 20) for a special use such as a seal for a filter element as in the case of the present invention.

The Examiner’s special attention is directed to the language in claim 9 which calls for a “method of forming a seal section **which comprises filling a sealant composition for a filter element...in a groove of a molding die...**”, it also being recited that “the groove [is] formed coincident with the seal section to be formed on a top face and/or bottom of a cylindrical filter

element having a chrysanthemum-like cross section...”, claim 9 also specifically reciting “setting the molding die in a seal section-forming portion on the top face and/or bottom of the filter element **such that the filled sealant composition can be laminated...**”, etc.

All of these limitations are directed to the sealing composition and illustrate the substantial differences between the present invention and Takahashi’s mere mention of “a sealing agent” at col. 17 (and little more) or for “sealing of metal, ceramic or plastic parts” at col. 1 (and little more).

The Examiner is again requested to consider the earlier discussion regarding various examples of the use of a sealing agent of a photo-curing type such as in automobiles, mechanical uses, electric and electronic uses, etc., and the fact that depending upon the use, an appropriate viscosity is set. Thus, Takahashi’s mere mention of sealing agent, would not, it is submitted, in any fashion suggest the medium viscosity of 2000 mPa·s or more now recited in claim 9 for a filter element as called for the method claim 9.

Regarding Burk

Considering all of the totality of disclosure in Burk, Applicants believe it is accurate to characterize Burk as follows.

A careful review of Burk shows that there is no disclosure regarding any range of the solubility parameter, there is no disclosure for use as a sealing agent for a filter element, the exact environment of the present invention, and the only disclosure which is present relates to manufacturing technology for an injection resin which is of the acrylic resin type, entirely different from the present invention.

The Examiner’s attention is directed, in this regard, to page 7, lines 5-9 of the present specification where it is taught:

“The solubility parameter as referred to herein means a strength at which molecular agglomerates gather. In the material of the molding die, in the case

where the solubility parameter exceeds 8.5, **wetting between the die and the sealant material becomes good so that mold release properties from the die becomes worse, and hence, such is not preferable.**" (Bolding added.)

Claim 9 of the present application, of course, specifically calls for "a solubility parameter of **8.5 or lower**".

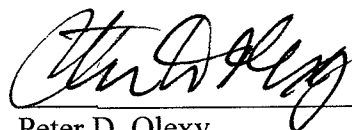
Burk is thus silent regarding any disclosure that mold release properties from a die become good when one uses a specific solubility parameter as discussed in the present specification above-quoted.

Applicants respectfully submit that the claims herein, as limited, are not properly rejected as obvious over the combination of Caronia in view of Takahashi and Burk as evidenced by Yaws, and request withdrawal and allowance.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Peter D. Olexy
Registration No. 24,513

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

65565

CUSTOMER NUMBER

Date: April 22, 2009